

## WHAT IS CLAIMED IS:

1. A light pipe for use in particular in an electronic display arrangement, and designed to transmit light signals from one of its ends referred to as an entry surface to its other end referred to as an exit surface going towards the eye of a user for viewing a virtual image, the pipe including a diffractive component on one surface, referred to as its improved surface, said diffractive component being an element satisfying the equation of an aspherical body of revolution, and being formed directly on said entry surface.
2. A pipe according to claim 1, wherein the diffractive component is an element of the "kinoform" type.
3. A pipe according to claim 1, wherein at least one of said surfaces is an aspherical surface including a "working" surface through which the light passes and presenting local curvature of sign that changes at least once.
4. A pipe according to claim 3, wherein said aspherical surface is a surface of revolution.
5. A pipe according to claim 3, wherein said aspherical surface includes on said working surface at least one point of inflection in its radial profile for which the second derivative relative to radial distance from the center of the working surface passes through zero and changes sign.
6. A pipe according to claim 1, wherein the image of the diffractive component has proximity of less than - 4 diopters.

7. A pipe according to claim 6, wherein the image of the diffractive component has proximity of less than - 10 diopters.

5 8. A pipe according to claim 1, wherein the image of the diffractive component has proximity greater than 0 diopters.

9. A pipe according to claim 1, comprising an optical  
10 relay formed by a rectangular bar for transmitting light along its longitudinal axis referred to as a first axis, and presenting at one of its ends said entry surface, and at its other end, both a reflection wall inclined relative to said first axis and an exit surface having an  
15 axis of revolution contained in a longitudinal plane of symmetry.

10. An electronic display arrangement suitable for being mounted on a frame of the spectacles type or on a  
20 specific system for being positioned in front of the eyes of a user, the arrangement including at least one light pipe according to claim 1.